# Docket No. RANSMITTAL OF APPEAL BRIEF (Large Entity) YOR920000555US1 Mantena et al. Re Applicație **Group Art Unit** Confirmation No. Customer No. Examiner Application No. Filing Date 46843 2134 9009 09/751,069 12/29/2000 Lipman, Jacob METHOD, SYSTEM AND PROGRAM PRODUCT FOR SYNCHRONOUS COMMUNICATION Invention: BETWEEN A PUBLIC ELECTRONIC ENVIRONMENT AND A PRIVATE ELECTRONIC **ENVIRONMENT COMMISSIONER FOR PATENTS:** Transmitted herewith is the Appeal Brief in this application, with respect to the Notice of Appeal filed on: April 20, 2006 The fee for filing this Appeal Brief is: \$500.00

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Wayn 7. Mr. Signature

Dated: June 20, 2006

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#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellants:

Mantena et al.

Confirmation No.: 9009

Serial No.:

09/751,069

Group Art Unit: 2134

Filed:

12/29/2000

Examiner: Lipman, Jacob

Title:

METHOD, SYSTEM AND PROGRAM PRODUCT FOR SYNCHRONOUS COMMUNICATION BETWEEN A PUBLIC ELECTRONIC ENVIRONMENT

AND A PRIVATE ELECTRONIC ENVIRONMENT

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Dear Sir:

#### APPELLANTS' APPEAL BRIEF TO THE BOARD OF

#### PATENT APPEALS AND INTERFERENCES

This is an appeal under 37 C.F.R. §1.191 and §1.192 from a Final Rejection, mailed on December 20, 2005, of claims 1-112, comprising all the claims finally rejected. A Notice of Appeal with a Request for One-Month Extension of Time was timely filed on April 20, 2006,

and received in the U.S. Patent and Trademark Office on April 20, 2006, with an Appeal Brief due June 20, 2006. Therefore, this Brief is being timely filed. A Transmittal of Appeal Brief is included herewith authorizing the Commissioner to charge the fee for filing this Appeal Brief in the amount of \$500 as set forth in 37 C.F.R. §1.17(f).

# **REAL PARTY IN INTEREST**

International Business Machines Corporation, the sole assignee of the inventors' rights in this patent application, is the real party in interest.

### RELATED APPEALS AND INTERFERENCES

A related case, U.S. Patent Application Serial No. 09/752,330 is currently under appeal, with an Appeal Brief filed on June 19, 2006 and, therefore, currently awaiting an Examiner's Answer. Otherwise, to the knowledge of Appellants, Appellants' undersigned legal representative, or the assignee, there are no other appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

#### STATUS OF CLAIMS

Claims 1-84 were originally presented in the subject application. Claims 3, 11, 16, 31, 39, 44, 59, 67 and 72 were amended, and claims 85-112 added in an Amendment and Response to Office Action dated November 17, 2004. Claims 1, 29, 57 and 85 were amended in an Amendment and Response to Office Action dated April 28, 2005. Claims 1, 29, 57 and 85 were

amended in an Amendment and Response to Office Action dated November 28, 2005. Therefore, claims 1-112 remain in this case.

### STATUS OF AMENDMENTS

An amendment after final rejection was filed, dated February 21, 2006. However, only the cross-reference to related applications was updated; there were no claim amendments.

# SUMMARY OF CLAIMED SUBJECT MATTER

Claim 1 recites a method for synchronous communication between a public electronic environment and a private electronic environment. As shown in FIG. 2, and described in the application starting at page 2, line 13, the public electronic environment comprises computing unit 202 with browser 204, global computer network 210, and commerce site 208 on server 206. The private electronic environment 238 comprises messaging middleware 212 with several components on either side of firewall 230, and computing unit 214 running back end ERP application 216. Note that server 206 sits in both the public environment (commerce site 208) and the private environment (messaging client 218). The method comprises automatically routing a communication from a user in the public electronic environment to the private electronic environment. See the specification at, for example, page 8, lines 6-19. The method also comprises causing a reply to the communication to be produced within the private electronic environment in real time. See the specification at page 3, lines 16-17 and page 9, line 16 to page 10, line 3, describing an example of a reply to communication being produced within the private electronic environment in real time. The method further comprises automatically returning the

reply from the private electronic environment to the public electronic environment. See the specification at page 10, lines 3-15.

Claim 3 depends from claim 2, and recites that the automatically routing comprises routing the communication through messaging middleware. See the present application at page 8, line 12 to page 9, line 14, describing routing the communication from messaging client 218 through firewall 230 to second messaging client 224. In addition, claim 3 recites that the causing comprises causing by the messaging middleware the ERP application to produce the reply while the front end application and the messaging middleware wait therefor. See the present application at page 9, lines 16-24, describing sending a command from module 236 to the ERP application 216 to produce the reply while messaging client 224 of messaging middleware 212 and browser 204 wait therefor.

Claim 4 depends from claim 3, and recites that the causing comprises causing by the messaging middleware a command to be issued to the ERP application to trigger production of the reply. See the present application at page 9, lines 16-24, describing sending a command from module 236 to the ERP application 216 to produce the reply.

Claim 10 depends from claim 7, and recites that the messaging middleware comprises a first messaging client on the hosting server (FIG. 2, messaging client 218 on server 206 for commerce site 208), a first messaging server (messaging server 220), a second messaging server (messaging server 222), and a second messaging client (messaging client 224), and that forwarding the communication from the hosting server to the messaging middleware comprises forwarding the communication from the first messaging client to the first messaging server,

forwarding the communication from the first messaging server to the second messaging server, and forwarding the communication from the second messaging server to the second messaging client. See the present application at page 8, line 12 to page 9, line 4, and page 9, lines 12-14.

Claim 11 depends from claim 10, and recites that forwarding the communication from the first messaging client (messaging client 218, FIG. 2) to the first messaging server (messaging server 220) comprises generating by the first messaging client the token identifier and forwarding a token identifier along with the communication, and wherein the automatically returning comprises returning the token identifier to the first messaging client for verification.

As noted in the present application at page 8, lines 18-19, the token identifier tracks the message path.

Claim 14 depends from claim 10, and recites that forwarding the communication from the first messaging server (FIG. 2, messaging server 220) to the second messaging server (messaging server 222) comprises forwarding the communication across a fire wall (230). As described in the application at page 9, lines 1-5, when the communication is placed in transmission queue 226, it is transmitted over open channel 242 across firewall 230 to holding queue 232 of messaging server 222.

Claim 15 depends from claim 10, and recites that the second messaging client (FIG. 2, messaging client 224) comprises a module (module 236) for issuing a command to the ERP application (ERP application 216), wherein the causing comprises issuing the command from the second messaging client to the ERP application to trigger production of the reply, and wherein forwarding the communication from the messaging middleware to the ERP application

comprises forwarding the communication from the second messaging client to the ERP application (over standard connection 246). See the present application at page 9, lines 6-24.

Claim 23 depends from claim 3, and recites that the front end application comprises a browser (FIG. 2, browser 204), wherein the messaging middleware comprises at least two messaging clients (messaging clients 218 and 224) and at least one messaging server (messaging servers 220 and 222). See also the present application at page 10, lines 16-22. Claim 23 also recites that the automatically routing comprises sending the communication from the browser to a hosting server for a site on a global computer network, wherein one of the at least two messaging clients resides on the hosting server; forwarding the communication from the hosting server to the at least one messaging server; forwarding the communication from the at least one messaging server to another of the at least two messaging clients; and forwarding the communication from the another of the at least two messaging clients to the ERP application. See the present application at page 8, line 7 to page 9, line 24.

Claim 29 recites a system for synchronous communication between a public electronic environment and a private electronic environment. One example of such a system is shown in FIG. 2, and generally described in the specification as filed at page 6, line 13 through page 8, line 5. The system comprises means for automatically routing a communication from a user in the public electronic environment to the private electronic environment. A user sends a communication via browser 204 running on computing unit 202 over global computer network 210 to commerce site 208 running on server 206. Messaging client 218 routes the communication to private electronic environment 238. See the specification at page 8, lines

6-13. Messaging client 218 connects to messaging server 220 over a standard connection 240, then sends the communication to the messaging server with an identification of second messaging server 222. The communication is temporarily placed in transmission queue 226 of messaging server 220, then transmitted over open channel 242 (a standard connection monitored and controlled by channel software on massaging server 222) across firewall 230 to second messaging server 222. Once received, the communication is placed in holding queue 232 of the second messaging server. The system also comprises means for causing a reply to the communication to be produced within the private electronic environment in real time. Placing the communication in holding queue 232 of second messaging server 222 in some manner results in messaging client 224 being woken up. Module 236 then issues a command to ERP application 216 over standard connection 246 to produce a reply to communication. The ERP application then takes whatever action indicated by the command. See the application at page 8, line 13 to page 9, line 24. The system further comprises means for automatically returning the reply from the private electronic environment to the public electronic environment. As shown in FIG. 2 and described in the specification starting at page 11, line 1, the reply is returned over standard connections 248 and 250, to messaging server 222, which places it in reply queue 234. The reply queue points to messaging server 220, so the reply is transferred over open channel 252 to messaging server 220, which places the reply in local queue 228. When messaging client 218 detects data in local queue, it retrieves the reply over standard connection 254. Commerce site 208 then returns the reply to browser 204 for display over global computer network 210.

Claim 31 depends from claim 30, and recites that the means for automatically routing comprises means for routing the communication through messaging middleware, and that the

means for causing comprises means for causing by the messaging middleware the ERP application to produce the reply while the front end application and the messaging middleware wait therefor. A user sends a communication via browser 204 running on computing unit 202 over global computer network 210 to commerce site 208 running on server 206. Messaging client 218 routes the communication to private electronic environment 238. See the specification at page 8, lines 6-13. Messaging client 218 connects to messaging server 220 over a standard connection 240, then sends the communication to the messaging server with an identification of second messaging server 222. The communication is temporarily placed in transmission queue 226 of messaging server 220, then transmitted over open channel 242 (a standard connection monitored and controlled by channel software on massaging server 222) across firewall 230 to second messaging server 222. Once received, the communication is placed in holding queue 232 of the second messaging server. The system also comprises means for causing a reply to the communication to be produced within the private electronic environment in real time. Placing the communication in holding queue 232 of second messaging server 222 in some manner results in messaging client 224 being woken up. Module 236 then issues a command to ERP application 216 over standard connection 246 to produce a reply to communication. The ERP application then takes whatever action indicated by the command. See the application at page 8. line 13 to page 9, line 24.

Claim 32 depends from claim 31, and recites that the means for causing further comprises means for causing by the messaging middleware a command to be issued to the ERP application to trigger production of the reply. Placing the communication in holding queue 232 of second messaging server 222 in some manner results in messaging client 224 being woken up. Module

236 then issues a command to ERP application 216 over standard connection 246 to produce a reply to communication. The ERP application then takes whatever action indicated by the command. See the application at page 8, line 13 to page 9, line 24.

Claim 38 depends from claim 35, and recites that the messaging middleware comprises a first messaging client on the hosting server (FIG. 2, messaging client 218 on server 206 for commerce site 208), a first messaging server (messaging server 220), a second messaging server (messaging server 222), and a second messaging client (messaging client 224), and wherein the means for forwarding the communication from the hosting server to the messaging middleware comprises means for forwarding the communication from the first messaging client to the first messaging server. See the application at page 8, lines 12-25. Claim 38 also recites that the means for forwarding the communication from the hosting server to the messaging middleware comprises means for forwarding the communication from the first messaging server to the second messaging server. See the application at page 9, lines 1-5. Claim 38 also recites that the means for forwarding the communication from the hosting server to the messaging middleware comprises means for forwarding the communication from the second messaging server to the second messaging client. See the application at page 9, lines 6-16.

Claim 39 depends from claim 38, and recites that the means for forwarding the communication from the first messaging client to the first messaging server comprises means for generating by the first messaging client a token identifier (page 8, lines 5-7) and means for forwarding the token identifier along with the communication (page 8, lines 5-7), and wherein

the means for automatically returning comprises means for returning the token identifier to the first messaging client for verification (page 6, line 19 and page 10, lines 1-3).

Claim 42 depends from claim 38, and recites that the means for forwarding the communication from the first messaging server to the second messaging server comprises means for forwarding the communication across a fire wall (page 7, lines 11-17; page 9, lines 1-5).

Claim 43 depends from claim 38, and recites that the second messaging client comprises a module (FIG. 2, module 236 of second messaging client 224; page 9, lines 6-18) for issuing a command to the ERP application, wherein the means for causing comprises issuing the command from the second messaging client to the ERP application to trigger production of the reply, and wherein means for forwarding the communication from the messaging middleware to the ERP application comprises means for forwarding the communication from the second messaging client to the ERP application (module 236 issues command to ERP application 216 on computing unit 214 over standard connection 246).

Claim 51 depends from claim 31, and recites that the front end application comprises a browser (FIG. 2, browser 204), wherein the messaging middleware comprises at least two messaging clients (messaging clients 218 and 224) and at least one messaging server (messaging servers 220 and 222, but see also page 10, lines 16-22), and wherein the means for automatically routing comprises means for sending the communication from the browser to a hosting server for a site on a global computer network, wherein one of the at least two messaging clients resides on the hosting server (browser 204 on computing unit 202 to commerce site 208 on server 206 over global computer network 210 via HTTP; page 5, line 12 to page 6, line 18). Claim 51 also

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recites that the means for automatically routing comprises: means for forwarding the communication from the hosting server to the at least one messaging server (messaging client 218 on server 206 to transmission queue 226 of messaging server 220 over standard connection 240; page 8, lines 12-25); means for forwarding the communication from the at least one messaging server to another of the at least two messaging clients (transmission queue 226 to holding queue 232 on messaging server 222 over open channel 242 across firewall 230, and then to messaging client 224 over standard connection 244; page 9, lines 1-16), and means for forwarding the communication from the another of the at least two messaging clients to the ERP application (from module 236 on messaging client 224 to ERP application 216 on computing unit 214 over standard connection 246; page 9, lines 16-20).

Claim 57 recites at least one program storage device readable by a machine, tangibly embodying at least one program of instructions executable by the machine to perform a method for synchronous communication between a public electronic environment and a private electronic environment. See the application at page 11, line 23 to page 12, line 1. As shown in FIG. 2, and described in the application starting at page 2, line 13, the public electronic environment comprises computing unit 202 with browser 204, global computer network 210, and commerce site 208 on server 206. The private electronic environment 238 comprises messaging middleware 212 with several components on either side of firewall 230, and computing unit 214 running back end ERP application 216. Note that server 206 sits in both the public environment (commerce site 208) and the private environment (messaging client 218). The method comprises automatically routing a communication from a user in the public electronic environment to the private electronic environment. See the specification at, for example, page 8, lines 6-19. The

method also comprises causing a reply to the communication to be produced within the private electronic environment in real time. See the specification at page 3, lines 16-17 and page 9, line 16 to page 10, line 3, describing an example of a reply to communication being produced within the private electronic environment in real time. The method further comprises automatically returning the reply from the private electronic environment to the public electronic environment. See the specification at page 10, lines 3-15.

Claim 85 recites a method for providing a computing infrastructure. See the present application at, for example, page 11, lines 13-14. The method comprises integrating computerreadable code into a computing system, wherein the computer-readable code in combination with the computing system is adapted to perform automatically routing a communication from a user in a public electronic environment to a private electronic environment. See the present application at page 11, line 23 to page 12, line 1. As shown in FIG. 2, and described in the application starting at page 2, line 13, the public electronic environment comprises computing unit 202 with browser 204, global computer network 210, and commerce site 208 on server 206. The private electronic environment 238 comprises messaging middleware 212 with several components on either side of firewall 230, and computing unit 214 running back end ERP application 216. Note that server 206 sits in both the public environment (commerce site 208) and the private environment (messaging client 218). The computer-readable code in combination with the computing system is also adapted to perform causing a reply to the communication to be produced within the private electronic environment in real time. See the specification at page 3, lines 16-17 and page 9, line 16 to page 10, line 3, describing an example of a reply to communication being produced within the private electronic environment in real

time. The computer-readable code in combination with the computing system is further adapted to perform automatically returning the reply from the private electronic environment to the public electronic environment. See the specification at page 10, lines 3-15.

### GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- 1. The final Office Action rejected claims 1-7, 10, 11, 14-17, 22-27, 29-35, 38, 39, 42-45, 50 55, 57-63, 66, 67, 70 73, 78-83, 85-91, 94, 95, 98-101, and 106-111, under 35 U.S.C. §102(b), as allegedly anticipated by ERPNet, as Dialog File 20, accession No. 02821200.
- 2. The final Office Action also rejected claims 1, 29, 57 and 85 under 35 U.S.C. §102(b), as allegedly anticipated by Gralla, "How the Internet Works."

# **ARGUMENT**

# 35 U.S.C. §102(b) Rejection ERPNet

With respect to the anticipation rejection, it is well settled that a claimed invention is not anticipated unless a single prior art reference discloses: (1) all the same elements of the claimed invention; (2) found in the same situation as the claimed invention; (3) united in the same way as the claimed invention; (4) in order to perform the identical function of the claimed invention. In this instance, ERPNet fails to disclose at least one element of each of the independent claims and as a result does not anticipate Appellant's invention.

Claim 1 recites, for example, causing a reply to the communication to be produced within the private electronic environment in real time.

Appellants could find no disclosure, teaching or suggestion in ERPNet of obtaining a reply within a private electronic environment in response to a user communication, or doing so in real time. Appellants point out that the example given for the system in ERPNet is the ordering of an automobile. No reply to the order per se is disclosed; rather, the progress of the order is tracked. Against the real time aspect of claim 1, the final Office Action cites the first paragraph on page two of ERPNet (i.e., paragraph nine of the reference). However, the cited paragraph, in conjunction with the paragraph immediately prior to that cited, actually discusses the order flowing from the front end to the back end (i.e., one way). There is no mention of a reply being produced.

Moreover, Appellants submit that one of ordinary skill in the art would understand what is meant by "real time" in the context of claim 1. As one example, a definition for "real time" from the well-known whatis.com information technology site is given as (hard copy included with response dated February 21, 2006):

Real time is a level of computer responsiveness that a user senses as sufficiently immediate or that enables the computer to keep up with some external process (for example, to present visualizations of the weather as it constantly changes). Real time is an adjective pertaining to computers or processes that operate in real time. Real time describes a human rather than a machine sense of time.

The above definition is also consistent with the description of a communication example given in the present application starting at page 8, line 6. See also, for example, page 3, line 16. The Advisory Action alleges indefiniteness of "sufficiently immediate" above. However, Appellants are only citing the definition as an indication of what one of ordinary skill in the art would understand "real time" to mean; it is not a definition from the present application.

Claim 1 also recites, as another example, automatically returning the reply from the private electronic environment to the public electronic environment. Against this aspect of claim 1, the final Office Action cites to paragraph 8 of ERPNet. However, that paragraph discusses parts of the journey to the SAP R/3 (back end) system, and not any communication (let alone a reply) from the back end to the front end.

Therefore, Appellants submit that claim 1 cannot be anticipated by, or made obvious over, ERPNet.

Claims 29, 57 and 85 contain a limitation similar to that argued above with respect to claim 1. Therefore, claims 29, 57 and 85 also cannot be anticipated by, or made obvious over, ERPNet.

Appellants submit that the dependent claims are allowable for the same reasons as the independent claims from which they directly or ultimately depend, as well as for their additional limitations.

For example, claim 3 recites messaging middleware causing the ERP application to produce the reply while the front end application and the messaging middleware wait therefore.

Against claim 3, the final Office Action cites to the disclosure of ERPNet regarding MQSeries and MSMQ. However, the mere mention of such applications does not disclose a reply from the ERP application, or messaging middleware causing the same, much less while the front end application and the messaging middleware wait (recall that claim 1 recites the reply is produced in real time).

Therefore, Appellants submit that claim 3 cannot be anticipated by, or made obvious over, ERPNet.

Claims 31, 59 and 87 contain a limitation similar to that argued above with respect to claim 3. Therefore, claims 31, 59 and 87 also cannot be anticipated by, or made obvious over, ERPNet.

As another example, claim 4 recites that the causing further comprises causing by the messaging middleware a command to be issued to the ERP application to trigger production of the reply.

Against claim 4, the final Office Action cites to the disclosure of ERPNet regarding MQSeries and MSMQ. However, the mere mention of such applications does not disclose a command issued from messaging middleware to an ERP application to trigger production of a reply within a private electronic environment in real time.

Therefore, Appellants submit that claim 4 cannot be anticipated by, or made obvious over, ERPNet.

Claims 32, 60 and 88 contain a limitation similar to that argued above with respect to claim 4. Therefore, claims 32, 60 and 88 also cannot be anticipated by, or made obvious over, ERPNet.

As another example, claim 10 recites details regarding forwarding the communication from the hosting server to the messaging middleware, specifying a path through particular components of the messaging middleware.

Against claim 10, the final Office Action cites to paragraph 6 of ERPNet, disclosing a Java-enabled web browser, SAP R/3 and MQSeries or MSMQ. However, the mere mention of MQSeries and MSMQ does not alone disclose the claimed messaging middleware components or the particular flow of communication forwarding between the components.

Therefore, Appellants submit that claim 10 cannot be anticipated by, or made obvious over, ERPNet.

Claims 38, 66 and 94 contain a limitation similar to that argued above with respect to claim 10. Therefore, claims 38, 66 and 94 also cannot be anticipated by, or made obvious over, ERPNet.

As still another example, claim 11 recites generating, forwarding and returning a token identifier to/from particular messaging middleware components. Against claim 11, the final Office Action cites to paragraph 9 of ERPNet, mentioning tracking the automobile order. However, Appellants submit the cited section fails to disclose anything regarding the claimed token identifier or the particular path to/from the messaging middleware components.

Therefore, Appellants submit that claim 11 cannot be anticipated by, or made obvious over, ERPNet.

Claims 39, 67 and 95 contain a limitation similar to that argued above with respect to claim 11. Therefore, claims 39, 67 and 95 also cannot be anticipated by, or made obvious over, ERPNet.

As yet another example, claim 14 recites forwarding the communication between particular messaging middleware components across a firewall. Against claim 14, the final Office Action cites to paragraph 14 of ERPNet. However, the cited section of ERPNet actually discloses a year 2000 firewall to block messages and send them back, the opposite of the claimed forwarding.

Therefore, Appellants submit that claim 14 cannot be anticipated by, or made obvious over, ERPNet.

Claims 42, 70 and 98 contain a limitation similar to that argued above with respect to claim 14. Therefore, claims 42, 70 and 98 also cannot be anticipated by, or made obvious over, ERPNet.

As another example, claim 15 recites, in part, a module within a particular component of the messaging middleware for issuing a command to the ERP application to trigger production of the reply. Against claim 15, the final Office Action cites to paragraph 6 of ERPNet, disclosing a Java-enabled web browser, SAP R/3 and MQSeries or MSMQ. However, the mere mention of MQSeries and MSMQ does not alone disclose the claimed module or the reply-triggering command.

Therefore, Appellants submit that claim 15 cannot be anticipated by, or made obvious over, ERPNet.

Claims 43, 71 and 99 contain a limitation similar to that argued above with respect to claim 15. Therefore, claims 43, 71 and 99 also cannot be anticipated by, or made obvious over, ERPNet.

As still another example, claim 23 recites details regarding the path of the communication to the ERP application, including forwarding to particular components of the messaging middleware. Against claim 23, the final Office Action cites to paragraph 6 of ERPNet, disclosing a Java-enabled web browser, SAP R/3 and MQSeries or MSMQ. However, the mere mention of MQSeries and MSMQ does not alone disclose the claimed messaging middleware components or the particular flow of communication forwarding that is claimed.

Therefore, Appellants submit that claim 23 cannot be anticipated by, or made obvious over, ERPNet.

Claims 51, 79 and 107 contain a limitation similar to that argued above with respect to claim 23. Therefore, claims 51, 79 and 107 also cannot be anticipated by, or made obvious over, ERPNet.

# 35 U.S.C. §102(b) Rejection Gralla

With respect to the anticipation rejection, it is well settled that a claimed invention is not anticipated unless a single prior art reference discloses: (1) all the same elements of the claimed invention; (2) found in the same situation as the claimed invention; (3) united in the same way as the claimed invention; (4) in order to perform the identical function of the claimed invention. In

this instance, Gralla fails to disclose at least one element of each of the independent claims and as a result does not anticipate Appellant's invention.

Amended claim 1 recites, for example, automatically routing a communication from a user in the public electronic environment to the private electronic environment. Against this aspect of claim 1, the final Office Action cites to Gralla at page 263, step 4. However, Appellants submit that the transaction server is referred to in Gralla as "the site's," and the information is said to be sent "from the customer's computer to the ... transaction server ... over the internet ... [and] encrypted[.]" This results in a new inquiry from the transaction server to the credit card company, rather than routing the customer's communication. As shown on pages 262 and 263, the customer fills out an order form, then the transaction server sends a separate request ("OK to Accept?") to the bank to check the validity of the credit card. Thus, Appellants submit that the communication from the user to the transaction server (the order form) is not being routed to a private electronic environment.

In addition, contrary to the allegation in the final Office Action, Appellants submit one of ordinary skill would not view the transaction server as a user. In the Gralla scenario, the user is the customer. Moreover, Appellants submit that the portion of the transaction server actually communicating with the bank is part of a private environment that includes the bank. Appellants submit one of ordinary skill would assume separation of the public and private environments for security, though Gralla is silent on such details. Further, Appellants disagree that the order form is a request for a credit check. The order form is a request for goods or services, carrying with it express or implied permission to check the credit card number being used for payment.

Amended claim 1 also recites, as another example, causing a reply to the communication to be produced within the private electronic environment in real time. Against this aspect of claim 1, the final Office Action cites to Gralla at page 263, step 5. However, Appellants submit what is actually sent from the transaction server to the credit card company is a new inquiry regarding the users credit card number that is generated by the transaction server. Thus, any reply from the credit card company is not a reply to the user communication, but a reply to the newly generated inquiry from the transaction server.

Finally, amended claim 1 also recites automatically returning the reply from the private electronic environment to the public electronic environment. Against this aspect of claim 1, the final Office Action cites to Gralla at page 263, step 6. However, Appellants submit there is no disclosure, teaching or suggestion that the reply from the credit card company goes anywhere but to the transaction server. Thus, even ignoring the fact that the reply is not a reply to the user communication, in any case it is never returned to the public electronic environment, as claimed.

Therefore, Appellants submit that claim 1 cannot be anticipated by, or made obvious over, Gralla.

Claims 29, 57 and 85 contain limitations similar to that argued above with respect to claim 1. Therefore, claims 29, 57 and 85 also cannot be anticipated by, or made obvious over, Gralla.

# **CONCLUSION**

In conclusion, Appellants submit that none of claims 1-7, 10, 11, 14-17, 22-27, 29-35, 38, 39, 42-45, 50 55, 57-63, 66, 67, 70 73, 78-83, 85-91, 94, 95, 98-101, and 106-111 is anticipated by ERPNet, and that none of claims 1, 29, 57 and 85 is anticipated by Gralla. Therefore, Appellants submit that the final Office Action should be reversed in all respects.

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Dated: June 20, 2006.

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### **CLAIMS APPENDIX**

1. (Previously Presented) A method for synchronous communication between a public electronic environment and a private electronic environment, comprising:

automatically routing a communication from a user in the public electronic environment to the private electronic environment;

causing a reply to the communication to be produced within the private electronic environment in real time; and

automatically returning the reply from the private electronic environment to the public electronic environment.

- 2. (Original) The method of claim 1, wherein the public electronic environment comprises a front end application, wherein the private electronic environment comprises a back end Enterprise Resource Planning (ERP) application, wherein the automatically routing comprises automatically routing the communication from the front end application to the back end ERP application, wherein the causing comprises causing the ERP application to produce the reply, and wherein the automatically returning comprises automatically returning the reply from the ERP application to the front end application for providing to the user.
- 3. (Previously Presented) The method of claim 2, wherein the automatically routing comprises routing the communication through messaging middleware, and wherein the causing comprises causing by the messaging middleware the ERP application to produce the reply while the front end application and the messaging middleware wait therefor.
- 4. (Original) The method of claim 3, wherein the causing further comprises causing by the messaging middleware a command to be issued to the ERP application to trigger production of the reply.
- 5. (Original) The method of claim 3, wherein the automatically returning comprises returning the reply from the ERP application to the front end application through the messaging middleware.

- 6. (Original) The method of claim 3, wherein the front end application comprises a browser.
  - 7. (Original) The method of claim 6, wherein the automatically routing comprises: sending the communication from the browser to a hosting server for a site on a global computer network;

forwarding the communication from the hosting server to the messaging middleware; and

forwarding the communication from the messaging middleware to the ERP application.

- 8. (Original) The method of claim 7, wherein the sending comprises employing encryption for the communication.
- 9. (Original) The method of claim 8, wherein the employing comprises employing at least 128-bit Secure Socket Layer (SSL) encryption.
- 10. (Original) The method of claim 7, wherein the messaging middleware comprises a first messaging client on the hosting server, a first messaging server, a second messaging server, and a second messaging client, and wherein forwarding the communication from the hosting server to the messaging middleware comprises:

forwarding the communication from the first messaging client to the first messaging server;

forwarding the communication from the first messaging server to the second messaging server; and

forwarding the communication from the second messaging server to the second messaging client.

- 11. (Previously Presented) The method of claim 10, wherein forwarding the communication from the first messaging client to the first messaging server comprises generating by the first messaging client the token identifier and forwarding a token identifier along with the communication, and wherein the automatically returning comprises returning the token identifier to the first messaging client for verification.
- 12. (Original) The method of claim 10, wherein forwarding the communication from the first messaging client to the first messaging server comprises encrypting the communication by the first messaging client.
- 13. (Original) The method of claim 12, wherein forwarding the communication from the second messaging server to the second messaging client comprises decrypting the communication by the second messaging server.
- 14. (Original) The method of claim 10, wherein forwarding the communication from the first messaging server to the second messaging server comprises forwarding the communication across a fire wall.
- 15. (Original) The method of claim 10, wherein the second messaging client comprises a module for issuing a command to the ERP application, wherein the causing comprises issuing the command from the second messaging client to the ERP application to trigger production of the reply, and wherein forwarding the communication from the messaging middleware to the ERP application comprises forwarding the communication from the second messaging client to the ERP application.

server;

16. (Previously Presented) The method of claim 10, wherein forwarding the communication from the messaging middleware to the ERP application comprises forwarding the communication from the second messaging client to the ERP application, and wherein the automatically returning comprises:

sending the reply from the ERP application to the second messaging client; forwarding the reply from the second messaging client to the second messaging

forwarding the reply from the second messaging server to the first messaging server;

forwarding the reply from the first messaging server to the first messaging client on the hosting server; and

returning the reply from the hosting server to the browser for display.

- 17. (Original) The method of claim 16, wherein forwarding the reply from the second server to the first server comprises forwarding the reply through a fire wall.
- 18. (Original) The method of claim 16, wherein forwarding the reply from the second messaging client to the second server comprises encrypting the reply.
- 19. (Original) The method of claim 18, wherein forwarding the reply from the first server to the first messaging client on the hosting server comprises decrypting the reply.
- 20. (Original) The method of claim 16, wherein returning the reply from the hosting server to the browser for display thereby comprises employing encryption for the reply.
- 21. (Original) The method of claim 20, wherein the employing comprises employing at least 128-bit Secure Socket Layer (SSL) encryption.
- 22. (Original) The method of claim 7, wherein forwarding the communication from the hosting server to the messaging middleware and forwarding the communication from the messaging middleware to the ERP application comprise forwarding over a private network.

23. (Original) The method of claim 3, wherein the front end application comprises a browser, wherein the messaging middleware comprises at least two messaging clients and at least one messaging server, and wherein the automatically routing comprises:

sending the communication from the browser to a hosting server for a site on a global computer network, wherein one of the at least two messaging clients resides on the hosting server;

forwarding the communication from the hosting server to the at least one messaging server;

forwarding the communication from the at least one messaging server to another of the at least two messaging clients; and

forwarding the communication from the another of the at least two messaging clients to the ERP application.

- 24. (Original) The method of claim 3, wherein the messaging middleware comprises MQSERIES and the ERP application comprises SAP.
- 25. (Original) The method of claim 3, wherein the messaging middleware comprises MQSERIES.
- 26. (Original) The method of claim 3, wherein the messaging middleware comprises MSMQ.
  - 27. (Original) The method of claim 2, wherein the ERP application comprises SAP.
- 28. (Original) The method of claim 2, wherein the ERP application comprises BAAN.

29. (Previously Presented) A system for synchronous communication between a public electronic environment and a private electronic environment, comprising:

means for automatically routing a communication from a user in the public electronic environment to the private electronic environment;

means for causing a reply to the communication to be produced within the private electronic environment in real time; and

means for automatically returning the reply from the private electronic environment to the public electronic environment.

- 30. (Original) The system of claim 29, wherein the public electronic environment comprises a front end application, wherein the private electronic environment comprises a back end Enterprise Resource Planning (ERP) application, wherein the means for automatically routing comprises means for automatically routing the communication from the front end application to the back end ERP application, wherein the means for causing comprises means for causing the ERP application to produce the reply, and wherein the means for automatically returning comprises means for automatically returning the reply from the ERP application to the front end application for providing to the user.
- 31. (Previously Presented) The system of claim 30, wherein the means for automatically routing comprises means for routing the communication through messaging middleware, and wherein the means for causing comprises means for causing by the messaging middleware the ERP application to produce the reply while the front end application and the messaging middleware wait therefor.
- 32. (Original) The system of claim 31, wherein the means for causing further comprises means for causing by the messaging middleware a command to be issued to the ERP application to trigger production of the reply.

- 33. (Original) The system of claim 31, wherein the means for automatically returning comprises means for returning the reply from the ERP application to the front end application through the messaging middleware.
- 34. (Original) The system of claim 31, wherein the front end application comprises a browser.
- 35. (Original) The system of claim 34, wherein the means for automatically routing comprises:

means for sending the communication from the browser to a hosting server for a site on a global computer network;

means for forwarding the communication from the hosting server to the messaging middleware; and

means for forwarding the communication from the messaging middleware to the ERP application.

- 36. (Original) The system of claim 35, wherein the means for sending comprises means for employing encryption for the communication.
- 37. (Original) The system of claim 36, wherein the means for employing comprises means for employing at least 128-bit Secure Socket Layer (SSL) encryption.

38. (Original) The system of claim 35, wherein the messaging middleware comprises a first messaging client on the hosting server, a first messaging server, a second messaging server, and a second messaging client, and wherein means for forwarding the communication from the hosting server to the messaging middleware comprises:

means for forwarding the communication from the first messaging client to the first messaging server;

means for forwarding the communication from the first messaging server to the second messaging server; and

means for forwarding the communication from the second messaging server to the second messaging client.

- 39. (Previously Presented) The system of claim 38, wherein means for forwarding the communication from the first messaging client to the first messaging server comprises means for generating by the first messaging client a token identifier and means for forwarding the token identifier along with the communication, and wherein the means for automatically returning comprises means for returning the token identifier to the first messaging client for verification.
- 40. (Original) The system of claim 38, wherein means for forwarding the communication from the first messaging client to the first messaging server comprises means for encrypting the communication by the first messaging client.
- 41. (Original) The system of claim 40, wherein means for forwarding the communication from the second messaging server to the second messaging client comprises means for decrypting the communication by the second messaging server.
- 42. (Original) The system of claim 38, wherein means for forwarding the communication from the first messaging server to the second messaging server comprises means for forwarding the communication across a fire wall.

- 43. (Original) The system of claim 38, wherein the second messaging client comprises a module for issuing a command to the ERP application, wherein the means for causing comprises issuing the command from the second messaging client to the ERP application to trigger production of the reply, and wherein means for forwarding the communication from the messaging middleware to the ERP application comprises means for forwarding the communication from the second messaging client to the ERP application.
- 44. (Previously Presented) The system of claim 38, wherein means for forwarding the communication from the messaging middleware to the ERP application comprises means for forwarding the communication from the second messaging client to the ERP application, and wherein the means for automatically returning comprises:

means for sending the reply from the ERP application to the second messaging client;

means for forwarding the reply from the second messaging client to the second messaging server;

means for forwarding the reply from the second messaging server to the first messaging server;

means for forwarding the reply from the first messaging server to the first messaging client on the hosting server; and

means for returning the reply from the hosting server to the browser for display.

- 45. (Original) The system of claim 44, wherein means for forwarding the reply from the second server to the first server comprises means for forwarding the reply through a fire wall.
- 46. (Original) The system of claim 44, wherein means for forwarding the reply from the second messaging client to the second server comprises means for encrypting the reply.
- 47. (Original) The system of claim 46, wherein means for forwarding the reply from the first server to the first messaging client on the hosting server comprises means for decrypting the reply.

- 48. (Original) The system of claim 44, wherein means for returning the reply from the hosting server to the browser for display thereby comprises means for employing encryption for the reply.
- 49. (Original) The system of claim 48, wherein the means for employing comprises means for employing at least 128-bit Secure Socket Layer (SSL) encryption.
- 50. (Original) The system of claim 35, wherein means for forwarding the communication from the hosting server to the messaging middleware and means for forwarding the communication from the messaging middleware to the ERP application comprise means for forwarding over a private network.
- 51. (Original) The system of claim 31, wherein the front end application comprises a browser, wherein the messaging middleware comprises at least two messaging clients and at least one messaging server, and wherein the means for automatically routing comprises:

means for sending the communication from the browser to a hosting server for a site on a global computer network, wherein one of the at least two messaging clients resides on the hosting server;

means for forwarding the communication from the hosting server to the at least one messaging server;

means for forwarding the communication from the at least one messaging server to another of the at least two messaging clients; and

means for forwarding the communication from the another of the at least two messaging clients to the ERP application.

- 52. (Original) The system of claim 31, wherein the messaging middleware comprises MOSERIES and the ERP application comprises SAP.
- 53. (Original) The system of claim 31, wherein the messaging middleware comprises MQSERIES.

- 54. (Original) The system of claim 31, wherein the messaging middleware comprises MSMQ.
  - 55. (Original) The system of claim 30, wherein the ERP application comprises SAP.
- 56. (Original) The system of claim 30, wherein the ERP application comprises BAAN.
- 57. (Previously Presented) At least one program storage device readable by a machine, tangibly embodying at least one program of instructions executable by the machine to perform a method for synchronous communication between a public electronic environment and a private electronic environment, comprising:

automatically routing a communication from a user in the public electronic environment to the private electronic environment;

causing a reply to the communication to be produced within the private electronic environment in real time; and

automatically returning the reply from the private electronic environment to the public electronic environment.

58. (Original) The at least one program storage device of claim 57, wherein the public electronic environment comprises a front end application, wherein the private electronic environment comprises a back end Enterprise Resource Planning (ERP) application, wherein the automatically routing comprises automatically routing the communication from the front end application to the back end ERP application, wherein the causing comprises causing the ERP application to produce the reply, and wherein the automatically returning comprises automatically returning the reply from the ERP application to the front end application for providing to the user.

- 59. (Previously Presented) The at least one program storage device of claim 58, wherein the automatically routing comprises routing the communication through messaging middleware, and wherein the causing comprises causing by the messaging middleware the ERP application to produce the reply while the front end application and the messaging middleware wait therefor.
- 60. (Original) The at least one program storage device of claim 59, wherein the causing further comprises causing by the messaging middleware a command to be issued to the ERP application to trigger production of the reply.
- 61. (Original) The at least one program storage device of claim 59, wherein the automatically returning comprises returning the reply from the ERP application to the front end application through the messaging middleware.
- 62. (Original) The at least one program storage device of claim 59, wherein the front end application comprises a browser.
- 63. (Original) The at least one program storage device of claim 62, wherein the automatically routing comprises:

sending the communication from the browser to a hosting server for a site on a global computer network;

forwarding the communication from the hosting server to the messaging middleware; and

forwarding the communication from the messaging middleware to the ERP application.

- 64. (Original) The at least one program storage device of claim 63, wherein the sending comprises employing encryption for the communication.
- 65. (Original) The at least one program storage device of claim 64, wherein the employing comprises employing at least 128-bit Secure Socket Layer (SSL) encryption.

66. (Original) The at least one program storage device of claim 63, wherein the messaging middleware comprises a first messaging client on the hosting server, a first messaging server, a second messaging server, and a second messaging client, and wherein forwarding the communication from the hosting server to the messaging middleware comprises:

forwarding the communication from the first messaging client to the first messaging server;

forwarding the communication from the first messaging server to the second messaging server; and

forwarding the communication from the second messaging server to the second messaging client.

- 67. (Previously Presented) The at least one program storage device of claim 66, wherein forwarding the communication from the first messaging client to the first messaging server comprises generating by the first messaging client a token identifier and forwarding the token identifier along with the communication, and wherein the automatically returning comprises returning the token identifier to the first messaging client for verification.
- 68. (Original) The at least one program storage device of claim 66, wherein forwarding the communication from the first messaging client to the first messaging server comprises encrypting the communication by the first messaging client.
- 69. (Original) The at least one program storage device of claim 68, wherein forwarding the communication from the second messaging server to the second messaging client comprises decrypting the communication by the second messaging server.
- 70. (Original) The at least one program storage device of claim 66, wherein forwarding the communication from the first messaging server to the second messaging server comprises forwarding the communication across a fire wall.

- 71. (Original) The at least one program storage device of claim 66, wherein the second messaging client comprises a module for issuing a command to the ERP application, wherein the causing comprises issuing the command from the second messaging client to the ERP application to trigger production of the reply, and wherein forwarding the communication from the messaging middleware to the ERP application comprises forwarding the communication from the second messaging client to the ERP application.
- 72. (Previously Presented) The at least one program storage device of claim 66, wherein forwarding the communication from the messaging middleware to the ERP application comprises forwarding the communication from the second messaging client to the ERP application, and wherein the automatically returning comprises:

sending the reply from the ERP application to the second messaging client;
forwarding the reply from the second messaging client to the second messaging server;

forwarding the reply from the second messaging server to the first messaging server;

forwarding the reply from the first messaging server to the first messaging client on the hosting server; and

returning the reply from the hosting server to the browser for display.

- 73. (Original) The at least one program storage device of claim 72, wherein forwarding the reply from the second server to the first server comprises forwarding the reply through a fire wall.
- 74. (Original) The at least one program storage device of claim 72, wherein forwarding the reply from the second messaging client to the second server comprises encrypting the reply.

- 75. (Original) The at least one program storage device of claim 74, wherein forwarding the reply from the first server to the first messaging client on the hosting server comprises decrypting the reply.
- 76. (Original) The at least one program storage device of claim 72, wherein returning the reply from the hosting server to the browser for display thereby comprises employing encryption for the reply.
- 77. (Original) The at least one program storage device of claim 76, wherein the employing comprises employing at least 128-bit Secure Socket Layer (SSL) encryption.
- 78. (Original) The at least one program storage device of claim 63, wherein forwarding the communication from the hosting server to the messaging middleware and forwarding the communication from the messaging middleware to the ERP application comprise forwarding over a private network.
- 79. (Original) The at least one program storage device of claim 59, wherein the front end application comprises a browser, wherein the messaging middleware comprises at least two messaging clients and at least one messaging server, and wherein the automatically routing comprises:

sending the communication from the browser to a hosting server for a site on a global computer network, wherein one of the at least two messaging clients resides on the hosting server;

forwarding the communication from the hosting server to the at least one messaging server;

forwarding the communication from the at least one messaging server to another of the at least two messaging clients; and

forwarding the communication from the another of the at least two messaging clients to the ERP application.

- 80. (Original) The at least one program storage device of claim 59, wherein the messaging middleware comprises MQSERIES and the ERP application comprises SAP.
- 81. (Original) The at least one program storage device of claim 59, wherein the messaging middleware comprises MQSERIES.
- 82. (Original) The at least one program storage device of claim 59, wherein the messaging middleware comprises MSMQ.
- 83. (Original) The at least one program storage device of claim 58, wherein the ERP application comprises SAP.
- 84. (Original) The at least one program storage device of claim 58, wherein the ERP application comprises BAAN.
- 85. (Previously Presented) A method for providing a computing infrastructure, comprising:

integrating computer-readable code into a computing system, wherein the computer-readable code in combination with the computing system is-adapted to perform:

automatically routing a communication from a user in a public electronic environment to a private electronic environment;

causing a reply to the communication to be produced within the private electronic environment in real time; and

automatically returning the reply from the private electronic environment to the public electronic environment.

- 86. (Previously Presented) The method of claim 85, wherein the public electronic environment comprises a front end application, wherein the private electronic environment comprises a back end Enterprise Resource Planning (ERP) application, wherein the automatically routing comprises automatically routing the communication from the front end application to the back end ERP application, wherein the causing comprises causing the ERP application to produce the reply, and wherein the automatically returning comprises automatically returning the reply from the ERP application to the front end application for providing to the user.
- 87. (Previously Presented) The method of claim 86, wherein the automatically routing comprises routing the communication through messaging middleware, and wherein the causing comprises causing by the messaging middleware the ERP application to produce the reply while the front end application and the messaging middleware wait therefor.
- 88. (Previously Presented) The method of claim 87, wherein the causing further comprises causing by the messaging middleware a command to be issued to the ERP application to trigger production of the reply.
- 89. (Previously Presented) The method of claim 87, wherein the automatically returning comprises returning the reply from the ERP application to the front end application through the messaging middleware.
- 90. (Previously Presented) The method of claim 87, wherein the front end application comprises a browser.

91. (Previously Presented) The method of claim 90, wherein the automatically routing comprises:

sending the communication from the browser to a hosting server for a site on a global computer network;

forwarding the communication from the hosting server to the messaging middleware; and

forwarding the communication from the messaging middleware to the ERP application.

- 92. (Previously Presented) The method of claim 91, wherein the sending comprises employing encryption for the communication.
- 93. (Previously Presented) The method of claim 92, wherein the employing comprises employing at least 128-bit Secure Socket Layer (SSL) encryption.
- 94. (Previously Presented) The method of claim 91, wherein the messaging middleware comprises a first messaging client on the hosting server, a first messaging server, a second messaging server, and a second messaging client, and wherein forwarding the communication from the hosting server to the messaging middleware comprises:

forwarding the communication from the first messaging client to the first messaging server;

forwarding the communication from the first messaging server to the second messaging server; and

forwarding the communication from the second messaging server to the second messaging client.

- 95. (Previously Presented) The method of claim 94, wherein forwarding the communication from the first messaging client to the first messaging server comprises generating by the first messaging client the token identifier and forwarding a token identifier along with the communication, and wherein the automatically returning comprises returning the token identifier to the first messaging client for verification.
- 96. (Previously Presented) The method of claim 94, wherein forwarding the communication from the first messaging client to the first messaging server comprises encrypting the communication by the first messaging client.
- 97. (Previously Presented) The method of claim 96, wherein forwarding the communication from the second messaging server to the second messaging client comprises decrypting the communication by the second messaging server.
- 98. (Previously Presented) The method of claim 94, wherein forwarding the communication from the first messaging server to the second messaging server comprises forwarding the communication across a fire wall.
- 99. (Previously Presented) The method of claim 94, wherein the second messaging client comprises a module for issuing a command to the ERP application, wherein the causing comprises issuing the command from the second messaging client to the ERP application to trigger production of the reply, and wherein forwarding the communication from the messaging middleware to the ERP application comprises forwarding the communication from the second messaging client to the ERP application.

server;

100. (Previously Presented) The method of claim 94, wherein forwarding the communication from the messaging middleware to the ERP application comprises forwarding the communication from the second messaging client to the ERP application, and wherein the automatically returning comprises:

sending the reply from the ERP application to the second messaging client; forwarding the reply from the second messaging client to the second messaging

forwarding the reply from the second messaging server to the first messaging server;

forwarding the reply from the first messaging server to the first messaging client on the hosting server; and

returning the reply from the hosting server to the browser for display.

- 101. (Previously Presented) The method of claim 100, wherein forwarding the reply from the second server to the first server comprises forwarding the reply through a fire wall.
- 102. (Previously Presented) The method of claim 100, wherein forwarding the reply from the second messaging client to the second server comprises encrypting the reply.
- 103. (Previously Presented) The method of claim 102, wherein forwarding the reply from the first server to the first messaging client on the hosting server comprises decrypting the reply.
- 104. (Previously Presented) The method of claim 100, wherein returning the reply from the hosting server to the browser for display thereby comprises employing encryption for the reply.
- 105. (Previously Presented) The method of claim 104, wherein the employing comprises employing at least 128-bit Secure Socket Layer (SSL) encryption.

- 106. (Previously Presented) The method of claim 91, wherein forwarding the communication from the hosting server to the messaging middleware and forwarding the communication from the messaging middleware to the ERP application comprise forwarding over a private network.
- 107. (Previously Presented) The method of claim 87, wherein the front end application comprises a browser, wherein the messaging middleware comprises at least two messaging clients and at least one messaging server, and wherein the automatically routing comprises:

sending the communication from the browser to a hosting server for a site on a global computer network, wherein one of the at least two messaging clients resides on the hosting server;

forwarding the communication from the hosting server to the at least one messaging server;

forwarding the communication from the at least one messaging server to another of the at least two messaging clients; and

forwarding the communication from the another of the at least two messaging clients to the ERP application.

- 108. (Previously Presented) The method of claim 87, wherein the messaging middleware comprises MQSERIES and the ERP application comprises SAP.
- 109. (Previously Presented) The method of claim 87, wherein the messaging middleware comprises MQSERIES.
- 110. (Previously Presented) The method of claim 87, wherein the messaging middleware comprises MSMQ.
- 111. (Previously Presented) The method of claim 86, wherein the ERP application comprises SAP.

112. (Previously Presented) The method of claim 86, wherein the ERP application comprises BAAN.

# **EVIDENCE APPENDIX**

# RELATED PROCEEDINGS APPENDIX

THE STATE